UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,952	12/27/2001	Jacques Debiez	2001-072-TOU	9352

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/034,952	DEBIEZ ET AL.
	Examiner	Art Unit	
	Michael Pyzocha	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 9-13* is/are rejected.

7)☒ Claim(s) *7 and 8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-13 are pending.

2.   Response filed 07/30/2007 has been received and considered.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which

forms the basis for all obviousness rejections set forth in this

Office action:

> (a) A patent may not be obtained though the invention is not identically
> disclosed or described as set forth in section 102 of this title, if the
> differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at
> the time the invention was made to a person having ordinary skill in the
> art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

4.   Claims 1, 2, 4-6, and 11 rejected under 35 U.S.C. 103(a) as

being unpatentable over Fischer (US 5001752) in view of Hasebe

et al. (US 7000114) and further in view of Mincher et al. (US

5408506).

       As per claim 1, Fischer discloses private time; a private

time source in the form of a local running clock and indicating

a published time source in the form of a local running clock and

indicating a published time; at least one power supply arranged

to power the private time source and the published time source

(see figures 1 and 5 and column 3 line 58 through column 4 line

27); and control logic programmed to perform a time stamping

operation by receiving a message, appending the published time to the message to create a timestamp, and digitally signing the timestamp with a private key (see column 6 lines 9-57).

Fischer fails to disclose a method of updating the published time using a trusted external time source and verifying the difference between the updated value and the current value is within a predetermined value.

However, Hasebe et al. teaches a published time source update by sending a request to the trusted external time source for a published time update (see column 11 lines 43-60), receiving a reply from the trusted external time source including the published time update, updating the published time with the published time update (see column 11 line 61 through column 12 line 27) and Mincher et al. teaches updating a clock value if an update condition is satisfied, wherein the update condition is based in part on a time difference between the private time and the published time update (see column 3 lines 50-63).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to update the clock of Fischer using the methods put forth by Hasebe et al. and Mincher et al.

Motivation to do so would have been to verify the update is from the trusted time source (see Hasebe et al. column 11 line 61 through column 12 line 27) and to handle errors caused by the difference between the current clock value and the update value (see Mincher et al. column 3 lines 50-63).

As per claim 2, the modified Fischer, Hasebe et al. and Mincher et al. system discloses a printed circuit board including a connector for connecting to a bus of a computer, wherein the private time source, the public time source, the at least one power supply, and the control logic are mounted to the printed circuit board (see Fischer figures 1 and 5).

As per claim 4, the modified Fischer, Hasebe et al. and Mincher et al. system discloses the control logic is programmed to perform the published time source update at least once per month (see Hasebe et al. column 12 lines 28-41). As described by Hasebe et al., the time updates can occur at any prescribed regular time interval.

As per claims 5, 11, and 12, the modified Fischer, Hasebe et al. and Mincher et al. system discloses the update condition is not satisfied when the time difference is greater than a predetermined value (see Mincher et al. column 3 lines 50-63), but fails to explicitly disclose this value being 6 hours. However, Fischer discloses checking a time different and if this

difference is greater than a few milliseconds per day then to give an error (see column 4 lines 2-9). Since 6 hours is greater than a few milliseconds and would cause an error the modified Fischer, Hasebe et al. and Mincher et al. system discloses the limitations of claim 5.

As per claim 6, the modified Fischer, Hasebe et al. and Mincher et al. system discloses updating the published time with the published time update in a manner that is based on a time different between the published time and the published time update (see Mincher et al. column 3 lines 50-63).

5.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Fischer, Hasebe et al. and Mincher et al. system as applied to claim 2 above, and further in view of Esker (US 6236277).

As per claim 3, the modified Fischer, Hasebe et al. and Mincher et al. system fails to disclose the use of crystal oscillators to stabilize the time sources.

However, Esker teaches such crystal oscillators (see column 7 lines 3-11).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use crystal oscillators to stabilize the time sources of the modified Fischer, Hasebe et al. and Mincher et al. system.

Motivation to do so would have been that a crystal oscillator is a common way of efficiently maintaining a clock.

6.   Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Fischer, Hasebe et al. and Mincher et al. system as applied to claim 1 above, and further in view of Watson (US 6775704).

As per claims 9 and 10, the modified Fischer, Hasebe et al. and Mincher et al. system fails to disclose the update condition is further based on an elapsed time between sending the request and receiving the reply.

However, Watson teaches checking this time delay (see column 7 lines 29-32).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the verification of the time delay of the response in the modified Fischer, Hasebe et al. and Mincher et al. system.

Motivation to do so would have been to protect the system against replay attacks.

7.   Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Fischer, Hasebe et al. and Mincher et al. system as applied to claim 1 above, and further in view of Terao (US 6651167).

As per claim 13, the modified Fischer, Hasebe et al. and
Mincher et al. system fails to explicitly disclose the circuit
board is encapsulated in a tamperproof enclosure.

However, Terao teaches such an enclosure (see column 7
lines 2-11).

At the time of the invention it would have been obvious to
a person of ordinary skill in the art to enclose the modified
Fischer, Hasebe et al. and Mincher et al. system circuit board
in a tamperproof enclosure.

Motivation to do so would have been to make the system more
secure.

Allowable Subject Matter

8.   Claims 7 and 8 are objected to as being dependent upon a
rejected base claim, but would be allowable if rewritten in
independent form including all of the limitations of the base
claim and any intervening claims.

9.   The following is a statement of reasons for the indication
of allowable subject matter: the prior art fails to teach using
different methods of updating a time source based on the
different between two time values and the difference being
explicitly 5 seconds.

Response to Arguments

10. Applicant's arguments filed 07/30/2007 have been fully considered but they are not persuasive. Applicant argues that Mincher does not disclose the "private time" "published time" and "published time update" and that Mincher does not disclose the limitations of claim 5.

With respect to Applicant's argument that Mincher does not disclose the "private time" "published time" and "published time update", one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the rejection above, Fischer and Hasebe teach each of these different times. Mincher was relied upon for the teaching of updating a clock value based on a time difference between the private time (i.e. the node's clock) and the published time update (i.e. the calculated average clock values of the master node). Therefore, it would be obvious to one of ordinary skill in the art to use this teaching of updating as a reason to update the published time value of Hasebe. Applicant further states there is no motivation to combine the references; however, as given above, motivation to do so would have been to verify the update is from the trusted time source (see Hasebe et

al. column 11 line 61 through column 12 line 27) and to handle

errors caused by the difference between the current clock value

and the update value (see Mincher et al. column 3 lines 50-63).

With respect to Applicant's argument that Mincher does not

disclose the limitations of claim 5; when the tolerance limit is

exceeded more steps are required before the update can be

performed. In other words, when the tolerance limit is not

exceeded the update condition is satisfied and the update

happens at that point. However, when the tolerance limit is

exceeded the update condition is not satisfied and the clock is

not updated at that point; more processing must occur before an

update can attempt to occur. Therefore, when the tolerance

limit is exceeded the update condition is no satisfied.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the

extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action

is set to expire THREE MONTHS from the mailing date of this

action. In the event a first reply is filed within TWO MONTHS

of the mailing date of this final action and the advisory action

is not mailed until after the end of the THREE-MONTH shortened

statutory period, then the shortened statutory period will

expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated

from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than

SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier

communications from the examiner should be directed to Michael

Pyzocha whose telephone number is (571) 272-3875. The examiner

can normally be reached on 7:00am - 4:30pm first Fridays of the

bi-week off.

If attempts to reach the examiner by telephone are

unsuccessful, the examiner's supervisor, Emmanuel Moise can be

reached on (571) 272-3865. The fax phone number for the

organization where this application or proceeding is assigned is

571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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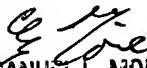
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